

DCX cautions & tips for BESL speakers

All BESL speakers are delivered with the optimal alignment under optimal measurement conditions (echo free outdoors).

!! When deviating from the standard alignment, save your changes in a new Internal Preset location, and also to your hard disk! In this way, you can recall the original program in case you need a reference for a suspect parameter change.

File – Use File option to Load and Save programs from/to your hard disk.

Store To.. – Stores the program settings to an internal hardware location within the DCX.

Recall nr.. – Recalls the program settings from an internal hardware location within the DCX.

Connect – Establishes communication between DCX and your PC. !! Note which direction you wish to synchronize between clicking the Synchronize button! If you want to start from the current DCX program, synch from DCX → PC. If you want to program the DCX from scratch (or after a Load Set) use PC → DCX. Normally, keep the Current Set and Internal Preset checkboxes checked. (The removable memory card is only useful for pro audio with a roaming DCX.)

Quick Synchronize – quickly synchronizes the DCX and PC based on the checkbox setting on the Connect page.

- Only save programs from the display page, where you can verify location names and numbers.
- Use the display page to quickly recognize whether the alignment looks right or looks wrong. Colors indicate which input each output routes to.
- Output Stereo Link – link same-type outputs together. For example, any change to subwoofer channel 1 will also change subwoofer channel 4. Most BESL alignments are NOT output linked. Make sure this box is unchecked.

Sum Gain – not used

!! Note that the AES/EBU digital input A still gets processed internally as stereo A=Left, B=Right!

Input Stereo Link – Indicates which input gains and EQ's are linked together. BESL 2-channel systems link A&B inputs (in spite of dual analog/digital setups using A=Digital, B/C=Analog). BESL fully-active HT systems (two DCX's) may or may not link inputs. It is acceptable for you to trim the HT 5 channels via your receiver calibration. This keeps your speaker calibration referenced back to the BESL lab, and independent of your current circumstances. Make gain and EQ changes for

In A + B Source – To switch between Direct Digital and Stereo Analog inputs, use the InA+B Source. Route Left->B and Right->C. Use input A for the digital input. Save the two configurations as two separate programs, thus saving both routing and input type differences.

Routing – 2-channel tri-amp routes A to 1-2-3, and B to 4-5-6 for analog only setups. Direct Digital setups route B to 1-2-3 and C to 4-5-6, but note that the channels will still be referred to as Left=A and Right=B! Yes, this is confusing at first. The digital link cable should only be plugged into Input XLR jack A.

Crossover – In general do not make any changes to the crossover page parameters. Be careful when switching between Crossover and EQ pages: check the channel on the right, it can change on you! Never check the Link box on the crossover page. Discovering that different crossover LP filters are used for two subwoofer channels is not an error for BESL systems that employ Quadrature Phase Bass Alignment.

EQ – In general do not make any changes to the output EQ page parameters, as these are considered part of the advanced crossover alignment. They are not for room, system, or personal preference EQ. Instead, make personal EQ changes only to the input EQ A-B-C.

Dyn 1, Dyn 2, Limiter pages – These pages are not used on BESL systems at present.

Long Delay – Do not use input delay, including for HT. (These are intended for PA systems.) Instead use the delays available in your HT processor. Use output channel delay only to optimize the time and phase relationship between BESL subwoofers and BESL monitors. Note that for fully active monitors you should keep the long delays for midrange and tweeter channels identical. Short Delay is used only for time-alignment between midrange and tweeter. Consider Short Delay part of the crossover alignment, and avoid making any changes on this page, including phase and polarity changes.

Short Delay – Discovering different phase values for subwoofer channels is not an error for BESL systems that employ Quadrature Phase Bass Alignment.

Refer to the DCX Sync Manual for more detailed information.

BESL
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